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Solidstate Controls' start-up and commissioning service will assure a successful installation of your new power system. For more on this service, see "Money Saving Operating Tips" on the back cover.

Digital Control Adds To Operating Capabilities Of PROCESSPOWER UPS

Solidstate Controls, Inc. (SCI) has introduced an advanced generation of man-machine interface panels for its PROCESSPOWER® single and three phase uninterruptible power supplies (UPS).

The PROCESSPOWER UPS product family has been specifically designed with the needs of the chemical, offshore, process control, power generation and petrochemical industries in mind. All of these double-conversion, digitally controlled, online UPS systems include an input isolation transformer, an IGBT based pulse-width-modulated (PWM) inverter, an output isolation transformer, a dual-source, fully controlled static switch and either an internally or externally mounted manual maintenance bypass switch. In addition, all PROCESSPOWER UPS systems include a full complement of protective fuses, circuit breakers and system controls.

The new man-machine user interface panel employs an LCD touch screen with 320 x 240 resolution. The interface continuously monitors current system status and displays it via an operational system mimic diagram. User friendly data logging features allow users to scroll through up to 100 current and historical alarm events. The system can also log and display up to 100 battery discharge events,

giving the user the ability to quickly troubleshoot the system and trend battery usage. System "HELP" buttons and system messages are strategically placed to further describe and define the functions

of menu keys and displayed data. The menu-driven touch screen is password protected against unauthorized or inadvertent changes to system set points or configurations.

Located directly under the display is a system interface keypad. The keypad provides control of all critical UPS functions. This eliminates the user's reliance on the touch screen for operational control of the UPS system.

The new interface panel also incorporates a Db9 connector that allows users to access the system's serial communications and report generation capabilities. System communications capabilities provide access to advanced system diagnostic features and system adjustments. System reports include information on software settings, real-time system voltage, current and frequency values, active alarm condition, historical alarm activity and historical battery discharge activity.

To receive complete information on the new PROCESSPOWER UPS system, contact us at 614-846-7500.



Houston Service Office Expands To The Southeast

With a large portion of our Client base located in the Gulf Coast, SCI's Client Services office in Houston covers Texas, Oklahoma, Arkansas, Louisiana, Mississippi, Alabama, Georgia, South Carolina and Florida, as well as Mexico, Latin America and the Caribbean. To handle the demand of our growing business in this region, SCI has expanded capabilities and made several key personnel assignments.

Mike Hendsley, one of our senior power consultants working in the Houston office, has relocated to Baton Rouge, LA. He will establish a service office and provide additional localized support for our Clients and partners.

Jerry Rainwater has been elevated to training coordinator/power consultant. He will use his considerable talents and field expertise to create technical training seminars for our Clients. He is also a regional power consultant on spare parts, services, sales and client consulting. Jerry will also develop new business opportunities for the Client Service Department.

Jason Cotton has been promoted to Client Services southeast regional service manager. Prior to this appointment, Jason served as Client Services administrator, and inventory specialist in the Houston office.

Steve Krusing has been elevated to application engineer. In this new role, he will be responsible for creating technical proposals and providing technical support to our Clients and sales partners.

Our Clients Come To Call:

Visitors are always welcome at our headquarters facility in Columbus, Ohio. Many of our Clients from around the world stop by to get a first-hand look at our plant and operations. To set up a visit, talk to your SCI Sales Representative or contact us directly. Those here in the recent months include:

- CALPINE
- ABB Lummus
- American Electric Power
- Taiwan Power
- Kellogg Brown & Root
- Zachry Constructors
- Contech Controls

Battery Management Services Enhance UPS Reliability

Battery Management Services from Solidstate Controls Inc. are designed to assist our Clients in prolonging the life of their UPS battery systems. Service offerings include battery monitoring, maintenance, installation and removal, capacity testing and spill containment, as well as other related functions. All work is done in accordance with IEEE standards and battery manufacturer requirements.

By utilizing our BMS2000 battery monitoring system, we can observe voltage, current, temperature, resistance and other parameters. Comparing this data to predetermined "benchmark" values, we are then able to analyze the condition of the cells and accurately predict the amount of battery life remaining.

According to SCI's Donovan Gibson, manager of the battery management services department, "The department



Donovan Gibson heads up the company's Battery Management Services department.

was originally created for one reason. Clients buy power backup systems for reliability to keep their critical systems operating. A key factor sometimes overlooked, however, is the battery side

of the system. If the batteries don't work, the UPS isn't going to work."

"Batteries should be considered an integral part of the power system. We felt that to really serve the best interests of our Clients, we needed to serve their battery needs as well," Gibson added.

The primary goals of the battery management program are summed up in the department's vision statement:

To create reliability and confidence in our Clients' DC power backup systems by proactively monitoring and maintaining all the critical components of that system.

For more information on any of our battery management services, contact us at 614-846-7500.

Company Founder Reflects Back On Early Days

Some 40 years ago, while working as an investment banker, John Holscher decided that he wanted to run his own business.



John Holscher, Solidstate Controls co-founder, discusses the early days of the company.

“In the course of performing my banking duties, I saw a lot of family-owned and small private companies. It seemed to me these people were having an awfully good time. This looked like a really challenging thing to do, making your own decisions — and if you did well, you did very well. I really wanted to do that,” stated Holscher.

“I had a chance to look at a lot of companies and found several that looked interesting,” he continued. “While it turned out that one of the businesses I went to see was not for sale, they did tell me about a man I should talk to about a potential venture.”

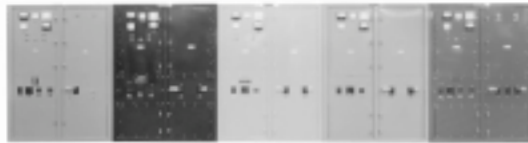
That man was Stu Jackson, a Ph.D. engineer who had no management experience, but someone who was also looking to start a company. When combined with Holscher’s experience in finance and building an organization, it looked to be a good fit.



“I got in touch with Stu and we talked. He had some patents that we could make use of. He was interested in building very large DC power supplies that could be used in applications such as electroplating. At the time, he had never even thought of making UPS equipment.”

Things really got started when Stu landed an order from the Forrestal Research Center in Princeton, New Jersey for an enormous power supply. The specifications were extremely demanding.

“We made Stu the president and I became chairman of the board and vice president. We brought in a couple of outside shareholders and started the company. After that, we bought a couple of used transformer winding machines from Westinghouse and added a draftsman and some technicians that Stu had known.”



This power supply job was SCI’s first order of a substantial size. Development and manufacturing on the project went on for several months. Transformer tests, however, kept failing. It turned out there was a problem with the insulating paper placed between the windings.

Once this was solved, the project was completed. The piece of equipment was so large it had to be shipped on a flatbed truck. John visited the Princeton facility 15 years later and the power supply was still operating.

But how did Solidstate Controls get into the UPS business? That happened when the firm decided to help out a manufacturer of gas compressors.

“There was a need to have back-up power to keep compressor stations operating along a gas pipeline. A major producer of these systems was dissatisfied with their UPS supplier,” commented Holscher.



After being recommended to the manufacturer and analyzing the units that had failed, SCI manufactured its own UPS design for the company. The units worked very well and, in turn, led SCI to examine the market for UPS in pipeline and power plant applications.

“Soon after, we took our UPS and static switch to the 1964 ISA trade show in New York City,” Holscher said, “We were mobbed. At that point in time, instrumentation was changing from analog control to direct digital systems. Analog controls with relays could stand dips in power or even very short outages, but digital controls would shut down.”

The big controls companies were all having problems with power, so many of these companies visited the SCI booth. As a result of these leads, John spent the next several years visiting potential customers and building business for the new firm.

“We were able to get one of the major controls companies as one of the first customers,” Holscher added. “We also started selling units directly to end users.”

John Holscher retired from the company in 1980, but his vision and commitment to

meeting the demands of our

Clients in those early days, helped set the stage for the Solidstate Controls we know in 2002.



MONEY SAVING ••••• OPERATING TIPS

What are the advantages of having a Solidstate Controls, Inc. power consultant perform the “start-up and commissioning service” on your new power equipment?

There are nothing but advantages. First of all, a major benefit of having SCI handle your start-up is “responsibility.” Our power consultants review the entire system, including the load and application involved. They are trained to inspect and test every aspect of the equipment; how each component works, and how each system interacts with existing equipment. Each start-up consists of step by step, precise checks and counter checks before the system is engaged.

SCI’s start-up and commissioning service is custom designed to provide our Clients with complete success in the initial powering-up of their UPS system. Proper start-up provides the best operational conditions possible.

Our factory-trained power consultants perform a variety of tasks during start-up. Since the equipment is completely tested and setup before it leaves the SCI factory, there is no need for field adjustments. Rather, the technician spends considerable inspecting the installation, and location of the equipment, paying close attention to things like power connections, available power/current, HVAC provisions, etc. HVAC is a particularly important consideration for the battery installation. Another important aspect to start-up is checking for any shipping damage, such as internal connections that may have come loose during shipping, and checking for any foreign objects/debris that may have fallen into the unit.

On completion of the start-up, our power consultant will review the operation of the equipment with site personnel and discuss any recommendations for services or spare parts stocking. Our goal is to assure your complete satisfaction and support for the life of the system — to help keep your business in business.

For more information on our start-up and commissioning capabilities, contact the Client Services group at 800-222-9079 or 614-846-7500.

Training Is Key To Providing Superior Service To Clients

The ongoing training of Solidstate Controls personnel from around the globe is a fundamental company objective.

Such was the case recently for two of our sales applications engineers based in Asia. Sidney Lao from Hong Kong, and Victor Lee from Shanghai, China, spent almost six weeks at our Columbus, Ohio headquarters during June and July. Although both have been with SCI for a few years, and have received training locally, this was their first opportunity to visit the factory. In addition to refresher training on our existing product lines and training on the new Digital Process Power (DPP) UPS systems, Sidney and Victor



Sidney Lao, left, and Victor Lee are shown during a recent training session in Columbus.

spent a good deal of their time in our manufacturing and test departments. They also spent considerable time working with key personnel in our sales and engineering departments.

This experience has provided Victor and Sidney with new insight not only into how things are done at SCI’s factory and greater product knowledge — it has also enabled them to gain a greater understanding of how to help our clients.

Foreign Language Websites Online

Solidstate Controls’ new foreign language websites are an extension of our commitment to Clients outside the United States. Coupled with our regional sales



and service offices located throughout the world, these websites enable us to communicate technical and general information in a language that our Clients and prospects feel most comfortable using.

All three of the new sites — Spanish, Chinese and Brazilian Portuguese — are now online. After only a few months of operation, they are already serving the needs of our Clients for information.

To access these new sites, simply go to any of the following URLs.

Spanish:

www.solidstatecontrolsinc-esp.com

Chinese:

www.solidstatecontrolsinc-chn.com

Brazilian Portuguese:

www.solidstatecontrolsinc-bz.com

Client Focus...

is an ongoing effort to bring updates and new product information to our clients. We invite you to submit articles, subject requests or comments.

Please forward any inquiries to:

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